

REMARKS

1. Introduction

In the Office Action mailed September 5, 2006, the Examiner rejected claims 1-2, 5-7, 12, and 15 under 35 U.S.C. § 103(a) as being unpatentable over Dowling, U.S. Patent No. 6,985,931, (“Dowling”) in view of McIntosh et al., U.S. Pub. No. 2003/0081565 (“McIntosh”). Additionally, the Examiner rejected claims 3-4, 8-11, 13-14, and 16-19 under 35 U.S.C. § 103(a) as being unpatentable over Dowling in view of McIntosh and further in view of Thornton et al., U.S. Pub. 2002/0101860 (“Thornton”).

In this Response, Applicants have amended claim 1 and canceled claim 5. Thus, claims 1-4 and 6-19 are currently pending.

For the reasons set forth below, Applicants request reconsideration and allowance of the claims, as amended herein.

2. Response to the Claim Rejections

a. **Claims 1-11**

Of these claims, claim 1 is independent. The Examiner has rejected claim 1 under § 103 as being unpatentable over Dowling in view of McIntosh. In response, Applicants respectfully request reconsideration because (i) the Dowling/McIntosh combination fails to teach a mobility management message that “facilitates roaming between said first and second wireless coverage areas by said multi-mode mobile station” and (ii) claim 1 has been amended to specify that “said second data register stores a data record for said multi-mode mobile station when said multi-mode mobile station operates in said second wireless coverage area.” These two points are discussed below in more detail.

The Examiner has acknowledged that Dowling does not disclose the elements of: (1) a private branch exchange (PBX) communicatively coupled to said at least one wireless access point; (2) a second data register communicatively coupled to said PBX and to said first data register; (3) said second data register being able to transmit at least one mobility management message to said first data register; and (4) whereby said at least one mobility management message facilitates roaming between said first and second wireless coverage areas by said multi-mode mobile station. Instead, the Examiner has relied on McIntosh for these elements. *See* Office Action, p. 3.

With respect to elements (2) and (3), the Examiner has cited to paragraph 53 of McIntosh. That paragraph describes “virtual identity modules” that have subscriber and security information for PBX terminal 106 stored therein. The paragraph further explains that a virtual identity module provides subscriber and security information for its associated PBX terminal to the public wireless network. Thus, the Examiner has identified the virtual identity modules as the “second data register” and has identified the virtual identity modules’ provision of information regarding PBX terminal 106 to the public wireless network as the “at least one mobility management message” recited in claim 1.

However, this provision of information by virtual identity modules does not “facilitate[] roaming between said first and second wireless coverage areas *by said multi-mode mobile station.*” This is because the information provided by a virtual identity module relates to its associated PBX terminal, and the PBX terminals in McIntosh are not mobile stations. To the contrary, the PBX terminals 106 have *wired* connections to PBX 108, as shown in Figure 2. Moreover, the whole impetus for the McIntosh approach is the problem created by the fact that

PBX terminals are *not* mobile stations. McIntosh explains this problem in the “Background” section:

One problem with this approach is that *PBX telephones 50*, coupled to the private wireless network 12 via the PBX 30, *lack the subscriber and security information, such as encryption keys found in mobile stations*, and therefore cannot access the public wireless network 14 directly over the A-link 46.

See McIntosh, ¶ 6 (emphasis added). Thus, Applicants submit that McIntosh fails to teach element (4) that the Examiner has acknowledged is lacking in Dowling.

Applicants recognize that the Examiner has alleged that paragraph 38 of McIntosh teaches “at least one mobility management message facilitates roaming between first and second wireless coverage areas by multi-mode mobile station.” *See* Office Action, p. 3. However, paragraph 38 does not refer to *roaming* at all. If the Examiner believes otherwise, the Examiner is requested to point out what specific disclosure in paragraph 38 relates to a mobility management message that facilitates roaming.

Thus, Applicants submit that the Dowling/McIntosh combination does not teach at least one mobility management message that facilitates roaming between first and second wireless coverage areas by a multi-mode mobile station.

In addition, Applicants have amended claim 1 to specify that the second data register stores a data record for said multi-mode mobile station when said multi-mode mobile station operates in said second wireless coverage area. In contrast, a virtual identity module in McIntosh (which the Examiner has identified as the “second data register”), does not store information regarding a *mobile station*. A virtual identity module instead stores information regarding a PBX terminal. *See* McIntosh, ¶¶ 42, 44, and 53. As noted above, the PBX terminals in McIntosh are

not mobile stations. Thus, amended claim 1 is clearly allowable over the Dowling/McIntosh combination.

Accordingly, Applicants submit that claim 1, as amended herein, is allowable over Dowling and McIntosh for at least the foregoing reasons. Applicants further submit that claims 2-11 are allowable for at least the reason that these claims are dependent on an allowable claim.

b. Claims 12-19

Of these claims, claim 12 is independent. The Examiner has rejected claim 12 under § 103 as being unpatentable over Dowling in view of McIntosh. In response, Applicants submit that this rejection is improper and should be withdrawn because the Dowling/McIntosh combination does not teach each and every element of claim 12, as set forth below.

Claim 12 recites, *inter alia*, “a private branch exchange (PBX), communicatively coupled to said wireless access point, storing information regarding said multi-mode mobile station in a WLAN data register.” The Examiner has acknowledged that Dowling does not teach this element. *See* Office Action, p. 5. Instead, the Examiner has relied on McIntosh, citing to paragraph 50. However, paragraph 50 of McIntosh refers to “virtual identity modules.” As noted above for claim 1, the virtual identity modules in McIntosh store information regarding PBX terminals, not mobile stations. Thus, the Dowling/McIntosh combination does not teach a “PBX … storing information regarding said multi-mode mobile station in a WLAN register,” as recited in claim 12.

Accordingly, Applicants submit that claim 12 is allowable over Dowling and McIntosh for at least the foregoing reasons. Applicants further submit that claims 13-19 are allowable for at least the reason that these claims are dependent on an allowable claim.

3. **Conclusion**

Applicants submit that the present application is in condition for allowance, and notice to that effect is hereby requested. Should the Examiner feel that further dialog would advance the subject application to issuance, the Examiner is invited to telephone the undersigned at any time at (312) 913-0001.

Respectfully submitted,

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